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ABSTRACT

Trade and industrial (T & I) instructors desiring professional development and credentialization through a university have numerous problems in validating and receiving credit for their technical competencies obtained through prior experiences and noncollegiate training. In the past, teachers have either acquired specialization competency based on college coursework, or specialization competency based on prior work experience. An approach which minimizes the shortcomings of both of these methods, however, is for T & I instructors to acquire specialization competency based on extensive work experience or a combination of work experience and technical credit. This approach is beneficial to both the institution and the individual. The institution will be attracting additional students, thus generating more student credit hours and revenue. The T & I instructors will be able to more effectively and efficiently use their time and resources by getting recognition for their prior learning regardless of where it took place. A number of complementary assessment approaches may be useful for assessing prior experiential learning: (1) individualized assessment using a portfolio; (2) credit by examination, such as the College Level Examination Program (CLEP) exams; or (3) credit recommendations for noncollegiate courses. A seven-step model for assessing occupational experiential learning is proposed: select the occupational fields for assessment; identify the competencies; verify the work experience; relate the competencies to the curriculum and goals of the student; measure occupational competence; evaluate and synthesize the measurement results; and determine the amount of credit to be awarded. (KC)

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UTILIZING EXPERIENTIAL LEARNING IN ASSESSING OCCUPATIONAL COMPETENCIES OF T&I INSTRUCTORS

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UTILIZING EXPERIENTIAL LEARNING IN ASSESSING OCCUPATIONAL COMPETENCIES OF T&I INSTRUCTORS

Introduction

You, the T&I instructor, are the most important educational resource your institution has. As a T&I instructor, you are a complex individual fulfilling many different roles and possessing various qualities.

You are a program planner and a curriculum developer. You have the responsibility of planning, developing and constantly updating your technical program. This includes everything from determining the ultimate terminal objective of your program down to writing the specific objectives for each lesson.

You are an organizer and manager of your classroom and shop or laboratory. You will physically arrange the equipment for optimum utilization. You will insure that proper safety procedures are followed.

You are an advisor and counselor for your students. You will advise your students as to courses they will need to take and deficiencies they will need to overcome. You will counsel with students as to their future goals and even aid them with their personal problems.

You are a motivator, an instructor, and an evaluator. You will motivate your students to learn through keeping your program relevant and interesting. You will instruct your students in your technical

specialty utilizing all the instructional methods, techniques and aids available. And you will evaluate your students using various assessment techniques to determine how well they are achieving the required competencies.

And finally, you are a skilled technician. You possess the knowledge and skills necessary which comes from your prior experiences and training. There is no substitute for experience and detailed knowledge and skills in the technical area being taught.

The competent T&I instructor is the builder of bridges between the changing and ever increasing subject matter on one side and a wide range of personalities on the other, personalities of individuals who must obtain new knowledge, skills and attitudes. In examining the qualities and techniques which contribute to effectiveness, "competence in the subject being taught" heads the list (Miller and Rose, 1975). The T&I instructor should be thoroughly competent in the skills and related knowledge to be taught.

Unfortunately, in many cases, those T&I instructors desiring professional development and credentialization through the university have found numerous problems in validating and receiving credit for their technical competencies obtained through prior experiences and noncollegiate training.

Background

In the past, there were two typical approaches taken to gain the credentialism and/or the professional development needed to obtain a position in Vocational-Technical Education.

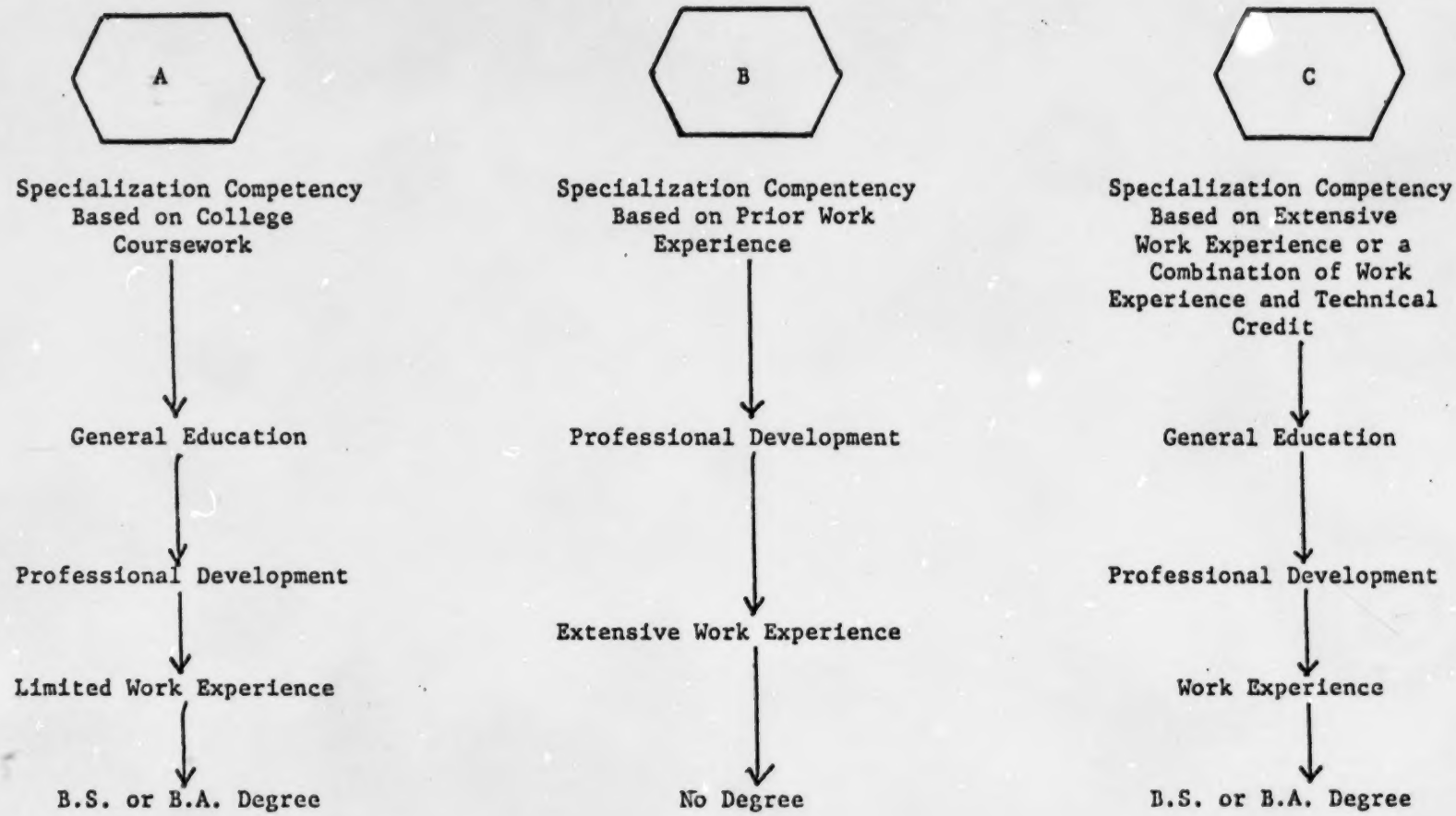

Figure 1

Three Approaches to T&I Instructor's Professional Development
(Nystrom, Bayne and McClellan, 1977)

The product of each approach tends to subscribe to a particular philosophical trend. (Nystrom, Bayne and McClellan, 1977)

INSERT FIGURE 1

In the first approach, the T&I instructors are holders of a Bachelor of Science or Bachelor of Arts Degree. Their occupational specialization was earned through university course work. Their degree program included a general education and professional education component. For the most part, these technical instructors have no formal work experience in their occupational specialization. This approach has as its philosophical base the concept that a person who knows how to teach can teach anything. The emphasis is placed on the mastery of the techniques of instruction.

In the second approach, the T&I instructors do not hold a Bachelor's degree. In most cases, they have completed fewer than fifty (50) college-level credits, most of which have been in the professional development area. However, these T&I educators possess extensive work experience. This approach has as its philosophical base the concept that the T&I instructor must first and foremost be a skilled practitioner in the occupational specialization to be taught.

Evolving within the past few years, particularly noticeable because of the increase in the demand for postsecondary vocational technical education, is a new breed of T&I instructor. This group represents a pragmatic approach to occupational teacher preparation. These T&I instructors are striving toward or hold a Bachelor's degree in which their occupational specialization is based on extensive work experiences; noncollegiate training and/or

postsecondary, usually community college or technical institute, technical course work. The traditional general education component, as well as, the professional development component is included in this approach. This type of program combines the best of both of the earlier approaches. It recognizes the importance of work experience in the specialization to be taught and provides the general education so essential to good teaching. (Nystrom, Bayne, and McClellan, 1977).

However, problems do exist. How do you validate the work experiences and noncollegiate training in the occupational specialization and award university credit for these prior activities?

Rationale

"Practice makes perfect." "Experience is the best teacher." The university is rediscovering these basic proverbs. Now, the social role of higher education calls for more than simple academic contributions, particularly in the area of technical teacher education. Pressures for technical and professional education runs head-on into complex social problems that call for a more knowledgeable, more skilled, more sophisticated and more complex individual. Financial exigencies sharpen questions of purpose, effectiveness, and accountability. Under these conditions, more interest in "prior learning" is logical and imperative. Although often regarded as a development of the 1970's, the formal awarding of credit for prior learning can be traced to 1953, when the School of General Studies of Brooklyn College provided this option in an adult baccalaureate program (Stanley, 1980, p. 3).

The reasons for this growth is closely related to several developments in higher education (Stanley, 1980). First of all, the increased interest in nontraditional education. Nontraditional education encourages diversity of individual opportunities rather than uniform prescription and deemphasizes time, space and even course requirements in favor of competence and performance.

Secondly, the increasing interest in lifelong lerning and expanding enrollment of adults also lead to enhanced recognition of prior learning. The "lock-step" process of education is inadequate for many current or potential technical educators since they have already acquired competence through prior learning and may be understandably reluctant to enroll in and devote time and money to courses which are repetitious and lack stimulation.

An additional factor influencing the acceptance of credit for prior learning has been the recognition of the fact that colleges and universities are not the only sources of higher learning and that an increasing number of noncollegiate origanizations sponsor work which may be directly analogous to that offered within academic institutions. With this development, simple justice suggests that individuals who have completed such work might receive recognition for their learning, if they subsequently elect to complete a college degree.

The fourth factor is concerned with the use and relevance of educational credentials in the work setting. Students desire to "have their learning, wherever and however attained, incorporated into the credit and credentialing system in order to take advantage

of subsequent educational opportunities without duplicating educational exzperiences and wasting personal resources (Miller and Mills, 1978, p. 5)."

A final factor which cannot be ignored is that of declining enrollments and accompanying pressures to seek a "new clientele." This economic impetus emphasizes the need for educational institutions which are responsive to those being served and is not necessarily a negative consideration. Carefully developed, implemented, and evaluated programs for the assessment of prior learning can attract new students, and along with other adaptations for these students, can be conducted without sacrificing the integrity of the educational environment. In fact, the environment and the educational process can be significantly improved.

The Council for the Advancement of Experiential Learning (CAEL) has played a significant role in advancing the recognition of learning wherever it occurs and in improving practices in assessing learning. Its growth, to over 300 institutions, indicates the expanding interest in assessment during the last decade, with an increasing number of colleges and universities adapting policies which permit the awarding of credit based on prior learning.

It was found (Davis and Knapp, 1978) that the "primary rationale" for granting academic recognition for prior experiential learning was:

- College level lerning should be recognized regardless of where it takes place,
- Adults should not be required to take courses meant to bring about learning they have already acquired,

- Nontraditional educational options and programs serve the diverse needs of students.

But, keep in mind, in the assessment of prior experiential learning that the primary attention should NOT be on the experience itself but rather on the learning outcomes of the experience. In large measure, the problems of experiential learning are simply those of good teaching. There are complex questions concerning purpose, substance, and quality; concerning students' abilities and differences; concerning the contribution and sequence of various learning activities; concerning evaluation and certification (Chickering, 1977).

Steps in Assessing Experiential Learning

Most advocates of credit for experiential learning would agree that if such learning is to be creditable in academic terms, it cannot be random. It must be learning that is clearly and demonstrably related to well-defined objectives; the credit granted for it must be proportionate to the total balance of requirements established for the pertinent degree; and it must be neither so esoteric as to defy description nor so mundane as to caricature the academic process. Proponents of experiential learning, in other words, are appropriately and responsibly concerned about the integrity of credits as a means for symbolizing learning, not as an end in itself (Kirkwood, 1976).

Institutions have three essential obligations in assessing and crediting experiential learning (Willingham, 1977):

- To develop a sensible rationale for the experiential learning that is consistent with the institution's mission, reasonable

in relation to its resources, and useful to its intended clientele;

- To translate that rationale into workable policies, guidelines, and operating procedures that are made clearly known to all students and interested parties; and
- To insure that those policies, guidelines, and procedures are followed with reasonable fairness and consistency and provide useful outcome.

CAEL has provided six basic steps for the assessment of experiential learning to serve as an organizing frame of reference.

Figure 2

SIX BASIC STEPS IN ASSESSING EXPERIENTIAL LEARNING--THEIR ORDER AND APPLICATION TO PRIOR AND SPONSORED LEARNING

Step	Prior Learning
1. IDENTIFY	1. Identify college-level learning acquired through life experience
2. ARTICULATE	2. Show how and what parts of that learning are related to the degree objective
3. DOCUMENT	3. Verify or provide evidence of learning
4. MEASURE	4. Determine the extent and character of learning acquired
5. EVALUATE	5. Decide whether the learning meets an acceptable standard and determine its credit equivalence
6. TRANSCRIBE	6. Record the credit or recognition of learning.

A Model for Assessing Occupational Experiential Learning

Since T&I instructors obtain their competencies in an occupational field, a model has been developed known as the "Work Assessment Model." This model is designed to specify the kinds of skills and knowledge acquired in various occupational settings, to define the learning outcomes, and to translate the work experiences into college credit. The Work Assessment Model is based on the six steps of assessment of experiential learning previously mentioned. The sequential stages of the model are:

1. Select the occupational fields for assessment.
2. Identify the competencies.
3. Verify that the student has had work experience.
4. Relate the competencies to the curriculum and to the educational goals of the student.
5. Measure occupational competence.
6. Evaluate and synthesize the measurement results.
7. Determine the amount of credit to be awarded (Sharon, 1977).

Approaches to Assessing Prior Experiential Learning

As noted earlier, prior experiential learning may include skills, knowledge and competency in any college-level curricula area and may have been acquired in a variety of settings. For these reasons a number of complementary assessment approaches may be useful.

(1) The individualized assessment, because effective assessment of experiential learning usually involves several assessors using more than one measurement technique, accurate communication throughout the six steps of assessment can be a problem, especially in assessing prior experiential learning. Most of the efforts to seek solutions to this problem have centered around the portfolio. A portfolio can be described simply as a file or folder of accumulated information about a student's experiences and accomplishments that can be the vehicle for organizing and distilling raw experiences into a manageable form for assessment. This folder usually contains the following items: A resume listing the student's educationa, employment, community, or volunteer experiences, and other pertinent data; a narrative that is usually autobiographical in tone and contains the student's implicit or explicit claim to learning; a statement requesting credit in a specific subject area or recognition of one or several sompetencies; and a set of documents, such as letters of verification and job descriptions, that provide evidence that the experiences emphasized by the student in the narrative did indeed take place.

Clearly, a portfolio is not only a dossier--it is the result of a process by which experiences can be translated into educational outcomes or competencies, documented, and assessed for academic credit or recognition (Knapp, 1975).

(2) Credit by Examination is another approach which can be utilized. In this approach a variety of examinations such as CLEP (College Level Examination Program) Exams,

NOCTI (National Occupational Competency Testing Institute) Exams, ACT-PEP (Proficiency Examination Program) Exams, faculty-designed proficiency exams and "testing out" of a course are methods commonly employed.

(3) Credit recommendations for noncollegiate courses is a third approach which can be utilized. It has been recognized for many years that military training programs are analogous in many respects to traditional college courses. A guide providing postsecondary educational credit recommendations for military training was published by the American Council on Education (1980), Course exhibits in the guide for military classroom courses include (1) the title, (2) course number,(3) location, (4) length, (5) objectives, (6) description of the instruction and subject areas covered, and (7) credit recommendations. Most courses are full-time and are taught in service schools with a prescribed course of instruction and qualified instructors. Credit recommendations are provided in four categories: (1) vocational certificate, (2) lower-division baccalaureate/associate degree, (3) upper-division baccalaureate degree, and (4) graduate degree.

In a more recent extension of this concept, credit recommendations for courses offered by other noncollegiate organizations (businesses, labor unions, professional organizations, cultural organizations, and government) have been prepared jointly by the American Council on Education and the University of the State of New York in the "Project on Noncollegiate Sponsored Instruction" (1976). Using the same evaluation processes and credit categories, a variety of regularly scheduled noncollegiate courses have been evaluated.

Summary

T&I instructors are in need of new and innovative approaches to higher education which gives consideration of and credit for prior experiential learning. These approaches are beneficial to both the institution and the individual. The institution will be attracting additional students thus generating more student credit hours. And additional credit hours mean additional funding. The T&I instructors will be able to more effectively and efficiently utilize their time and resources by getting recognition for their prior learning regardless of where it took place.

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